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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,843	03/30/2001	Samir Kumar Brahmachari	Q63915	7045
7590	06/08/2006		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213				SMITH, CAROLYN L
			ART UNIT	PAPER NUMBER
			1631	

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/820,843	BRAHMACHARI ET AL.	
	Examiner	Art Unit	
	Carolyn L. Smith	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 March 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 20-24,26-30,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 20-24,26-30,32 and 33 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Applicant's amendments and remarks, filed 3/20/06, are acknowledged. Amended claims 20, 22, and 29 are acknowledged.

Applicant's arguments, filed 3/20/06, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from the previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claims 20-24, 26-30, and 32-33 are herein under examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-24, 26-30, and 32-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Under the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (published in the O.G. notice (1300 OG 142) on 11/22/2005) a method that does not result in a physical transformation of matter MAY be statutory where it recites a concrete, tangible and useful result; i.e. a practical application. The "validating" step in instant claim 20 is not limited to be a physical step, and is not recite a physical transformation of matter. In conclusion, these claims do not actually recite a physical transformation result or a concrete, TANGIBLE, and useful result. Therefore, they are considered to be non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-24, 26-30, and 32-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20, step (a) recites "wherein said protein sequences are predicted from whole genomic sequences or are predicted from partial genomic sequences comprising at least one chromosome" which is vague and indefinite. It is unclear if whole genomic sequences, whole genomic sequences AND partial genomic sequences, or partial genomic sequences only comprise at least one chromosome. Clarification of this issue via clearer claim wording is requested. Claims 21-24, 26-30 and 32-33 are also rejected due to their dependency from claim 20.

In claim 20, it is unclear what relationship step (d) has to the rest of the claim. Are the "outlier proteins" of step (d) the same as those identified in step (c) or are they different outliers? Note that step (d) does not recite "the" outlier proteins, therefore the outliers of step (d) may be different from those of step (c). Clarification of this issue via clearer claim wording is requested. Claims 21-24, 26-30 and 32-33 are also rejected due to their dependency from claim 20.

In claim 20, it is unclear what sort of comparison is being carried out in step (d). It is unclear if the comparison is one of length, GC percentage in the sequence, predicted tertiary structure, one or more of the sequence-based attributes recited in step (a), or various other

scenarios. Clarification of this issue via clearer claim wording is requested. Claims 21-24, 26-30 and 32-33 are also rejected due to their dependency from claim 20.

Claim 20 recites the limitation "an outlier protein" in step (e). There is insufficient antecedent basis for this limitation in the claim as it is unclear if this outlier is referring to one of the outlier proteins in step (c) or (d). Clarification of this issue via clearer claim wording is requested. Claims 21-24, 26-30 and 32-33 are also rejected due to their dependency from claim 20.

In claim 20, it is unclear what relationship, if any, is intended between steps (d) and (e). Is the selection of step (e) supposed to be dependent (or otherwise related in some way) to the results of the comparison of step (d)? Clarification of this issue via clearer claim wording is requested. Claims 21-24, 26-30 and 32-33 are also rejected due to their dependency from claim 20.

Claim 29 limits the method to be a computer-implemented one (i.e. performed by a computer system). However, the limitation that the CPU performs certain steps is confusing. Are these steps in addition to the claimed method? Or do they replace the method steps of claim 20? Or is this some sort of limitation of the CPU itself? It is also unclear what limitation of the METHOD of claim 20 is intended by the recitation of certain structural elements. Clarification of this issue via clearer claim wording is requested.

Claims 30 and 32 recite "using said outlier protein for a" purpose. It is unclear what method step or steps are intended to be encompassed by the "using" limitations. Clarification of this issue via clearer claim wording is requested.

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Claim 33 recites "said outlier protein can elicit an immune response" which lacks clarity as to how this is a limitation of the method. This phrase is an intended use for the protein, and it does not actually limit the method or the protein itself. Clarification of this issue via clearer claim wording is requested.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang, can be reached on (571) 272-0811.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tiffany Tabb whose telephone number is (571) 272-0556.

**MARJORIE A. MORAN
PRIMARY EXAMINER**

May 30, 2006

Marjorie A. Moran
05/30/06